

INTEL INVENTION DISCLOSURE
ATTORNEY-CLIENT PRIVILEGED COMMUNICATION
located at <http://legal.intel.com/patent/index.htm>

27946

DATE: 6-14-02

TMG-TM/ICG/OPG/OPD

It is important to provide accurate and detailed information on this form. The information will be used to evaluate your invention for possible filing as a patent application. **Invention Disclosure forms MUST be sent electronically via email to your manager/supervisor who should then forward with their approval to our email account "invention disclosure submission."** If you have any questions, please call 8-264-0444.

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(PROVIDE SAME INFORMATION AS ABOVE FOR EACH ADDITIONAL INVENTOR)

2. Title of Invention: OPTICAL XPAK TO XENPAK ADAPTER

3. What technology/product/process (code name) does your invention relate to (be specific if you can)

Related product name Xenpak & Xpak

4. Include several key words to describe the technology area of the invention in addition to # 3 above:
Xpak MSA , Xenpak MSA , 10gig transponder,

5. Stage of development (i.e. % complete, simulations done, test chips if any, etc.):
Product currently in conceptual stage

6a. Has a description of your invention been (or planned to be) published outside of Intel: Not at this time

If YES, was the manuscript submitted for pre-publication approval through the Author Incentive Program:

If YES, please identify the publication and the date published:

6b. Has your invention been used/sold or planned to be used/sold by Intel or others? Planned to be released

If YES, date it was sold or will be sold: Alpha samples in November, 2002 time frame

6c. Does this invention relate to technology that is or will be covered by a SIG (special interest group)/standard or specification?
No

If YES, name of SIG/standard/specification:

6d. If the invention is embodied in a semiconductor device, actual or anticipated date of tapeout?
Not applicable

6e. If the invention is software, actual or anticipated date of any beta tests outside Intel:
Not applicable

7. Was the invention conceived or constructed in collaboration with anyone other than an Intel blue badge employee
or in performance of a project involving entities other than Intel (e.g. government, other companies, universities
or consortia)? NO: NO If YES, name of individual or entity:

8. Is this invention related to any other invention disclosure that you have recently submitted? If so, please give the title and
inventors: NO

**PLEASE READ AND FOLLOW THE DIRECTIONS ON
HOW TO WRITE A DESCRIPTION OF YOUR INVENTION**

Try to limit your description to 2-3 pages
Do NOT attach a presentation, white paper, or specification
ANSWER ALL OF THE QUESTIONS BELOW

Please provide a description of the invention and include the following information:

**EXHIBIT 1
Page 2 of 4**

1. **Describe in detail what the components of the invention are and how the invention works.**

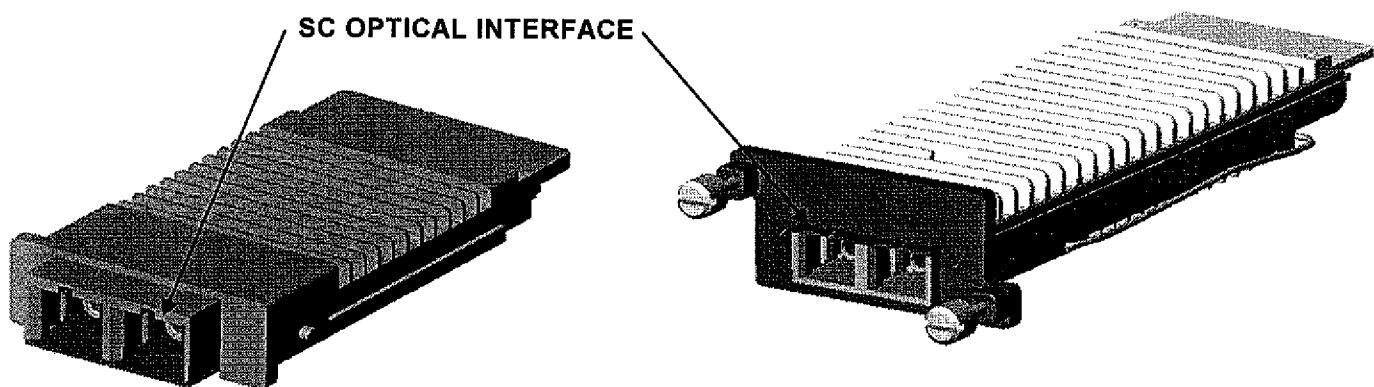
Currently the Xenpak and Xpak modules are designed independently without any
interchangeability of parts. The proposed concept is to make the functionality of the PC board

assembly be adaptable to both products and change the mechanical features in order to satisfy both product requirements. The proposed concept will allow a PC board assembly from the Xpak to be used in the Xenpak Transponder. The PC board assembly is designed to fit the Xpak module, but for the Xenpak module the same PC board assembly will create an incorrect position of the Optical interface. The key in allowing the transformation of a Xpak PC board to be used in a Xenpak is an Optical Patchcord. The Optical patchcord is the equivalent of an electrical extension cord and can allow the outside connector interface to be at a different location with respect to the PC board mounted optics.

2. Describe advantage(s) of your invention over what is currently being done.

The advantage of having a common PC board assembly is, reduced part cost, same basic assembly process, testing and qualifying protocol can be consolidated, common programming scheme , product characteristics are similar for customer...etc.

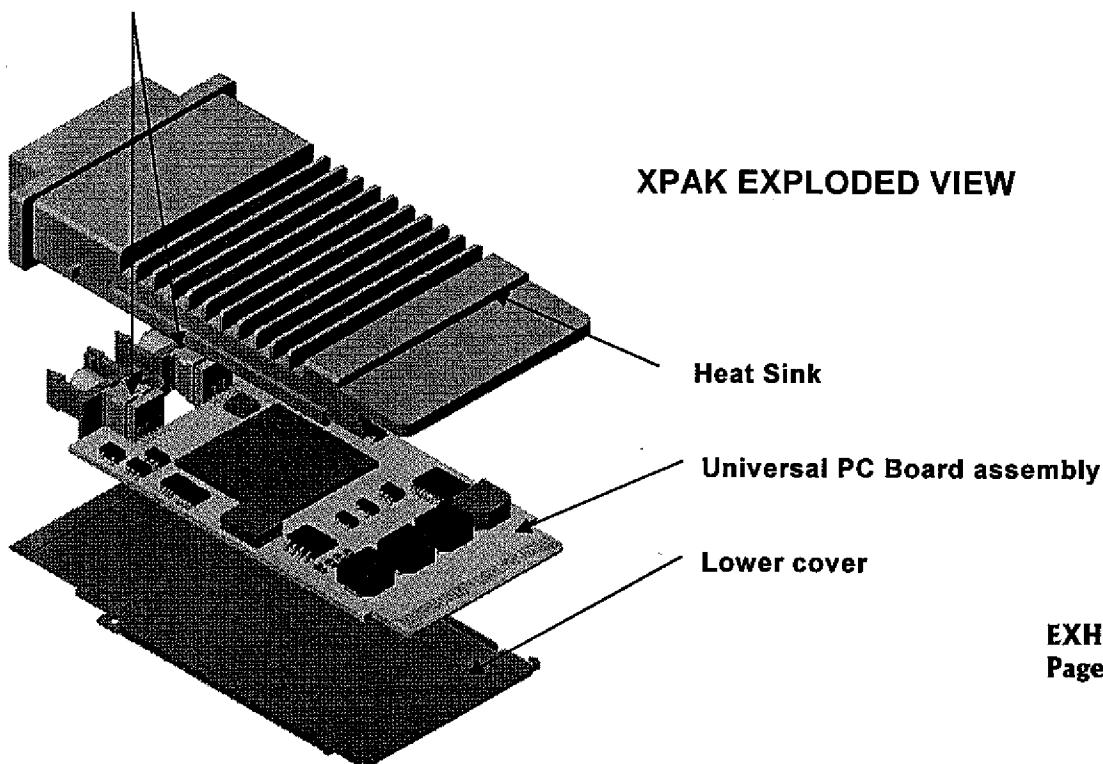
3. You MUST include at least one figure illustrating the invention. If the invention relates to software, include a flowchart or pseudo-code representation of the algorithm.



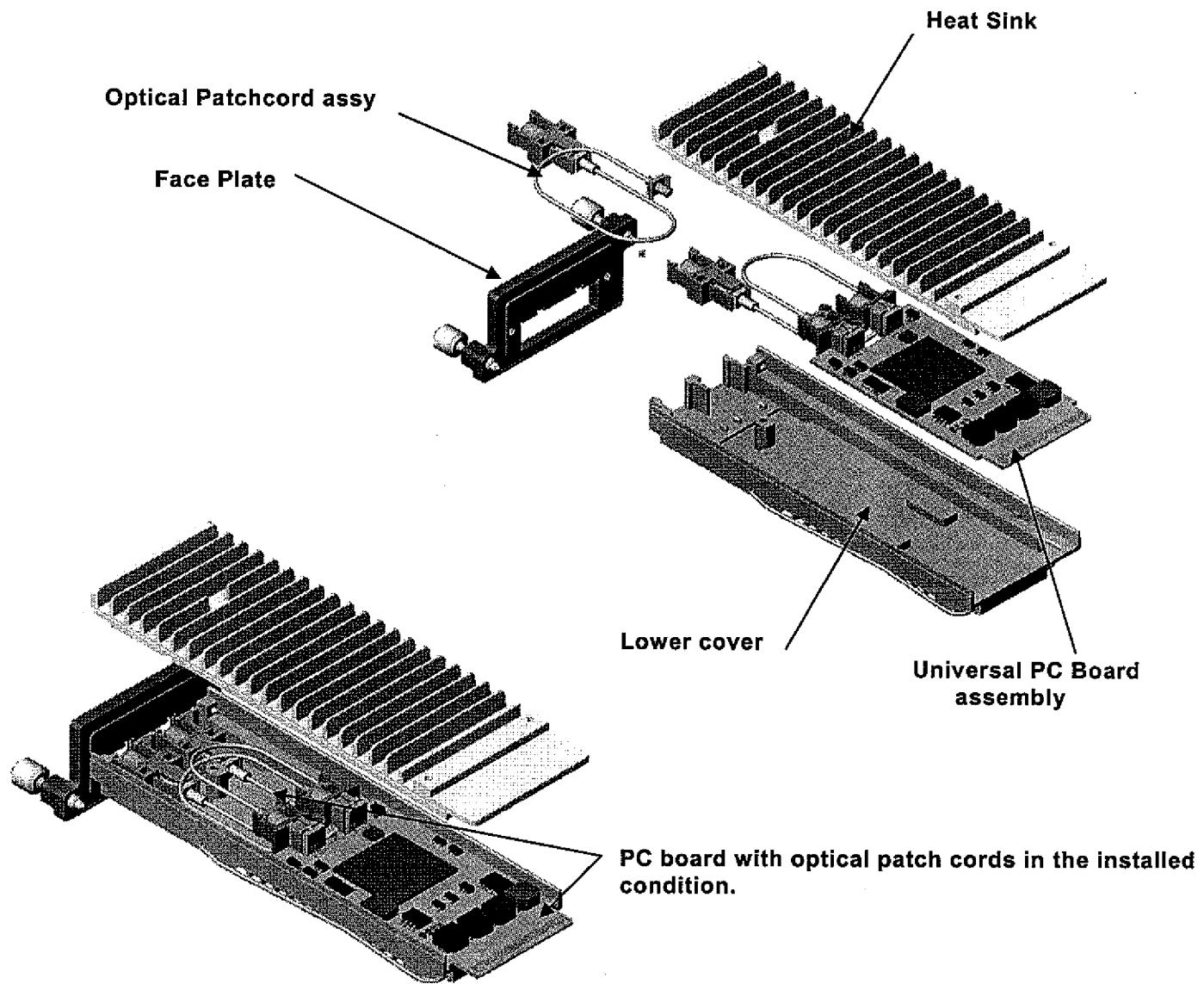
XPAK 10Gbits / Transceiver

XENPAK 10Gbits / Transceiver

PC BOARD MOUNTED OPTICS



XENPAK EXPLODED VIEW



4. **Value of your invention to Intel (how will it be used?).** By satisfying the two different markets with one solution (internally) Intel can eliminate most of the development cost of a new product.
5. **Explain how your invention is novel. If the technology itself is not new, explain what makes it different.** Currently the industry solves this type of problem by developing two different solutions for two products. This proposal will allow two different products to share a common core part , the PC board assembly.
6. **Identify the closest or most pertinent prior art that you are aware of.** None that we are aware of.
7. **Who is likely to want to use this invention or infringe the patent if one is obtained and how would infringement be detected?** Our competitors, Picolight, Infineon, JDSU, Agere, Mitsubishi, Hitachi and other transponder manufacturing companies

HAVE YOUR SUPERVISOR READ AND FORWARD IT ELECTRONICALLY
VIA E-MAIL TO "INVENTION DISCLOSURE SUBMISSION"

EXHIBIT I
Page 4 of 4

DATE: _____ SUPERVISOR: _____

BY APPROVING, I (SUPERVISOR) ACKNOWLEDGE THAT I HAVE READ AND UNDERSTAND THIS
DISCLOSURE, AND RECOMMEND THAT THE HONORARIUM BE PAID

Applicant: <http://www.watsonpatent.com/book.htm?appnum=1455640>

Favotec

[All] [Open]

Amergent Optics, Inc.

CIG Product Design

Graal [For Engeniering]

Databases Patent, Govt, AntP...

BTS solution

Glockermann

Diffractive Software, Inc.

Free Contracts for your idea.

Ditrono - Manufacturing

Ditrono - SVCC, US & Canada...

Intel Advanced Imaging Mem...

Intel Communications Group N...

Intel management courses

Intel Work Week Calendar 200...

ISS Home

IT Products Catalog

Electro-Optic

Legal Web Site Considered In...

Liquid Lens Optic Product

Lightlock Infrared Filter Pack

My Experts

Optical Camera

Report a damaged personal...

Motor - Lock

Personal

Patent expert

10/26

EXHIBIT II
Page 1 of 1

SEARCH PUBLISHED

10/26/2002 PENDING NO

10/16/2002 ISSUED NO

10/05/2002 DECLINE

10/02/2002 PENDING NO

10/02/2002 PUBLISHED

10/02/2002 PENDING NO

OPTICALMENS

27287

OPTICALMENS

27288

OPTICALMENS

XENPAK ADAPTER

OPTICAL XPAK TO



New Client / Matter Form

Page 1

Date Prepared By:	11/6/2003 af	<input type="radio"/> NEW CLIENT <input checked="" type="radio"/> EXISTING CLIENT	Client Matter	110578 110578-135407
CLIENT INFORMATION				
Client Model: *				
Client Name 1: *	INTEL LEGAL - PPG/OPTICAL-MEMS			
Client Name 2:				
Address Line 1: *	INTEL CORPORATION			
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City:	SANTA CLARA	State:	CA	
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International Prefix No:	Phone No:		(408) 765-6886	Fax No:
SS/Tax ID:				
Contact Name:				
Contact Title:				
Contact Email Address:				
Domestic / International:	D	Add To Timekeeper's Contact List:		
Notes	NEED C/M and file on a RUSH BASIS, PLEASE. Please only create a trifold with side colored barcode sticker and white barcode sticker on it. Check file out to supervising attorney, but deliver to me. Thanks. - Allison Fahl			

WFM_1018

EXHIBIT III
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